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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/712,324	11/13/2003	Bill Riel	20517.034	1980
42922	7590	01/13/2006		
WHITAKER, CHALK, SWINDLE & SAWYER, LLP 3500 CITY CENTER TOWER II 301 COMMERCE STREET FORT WORTH, TX 76102-4186			EXAMINER STEPHENSON, DANIEL P	
			ART UNIT 3672	PAPER NUMBER

DATE MAILED: 01/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/712,324	Applicant(s) RIEL ET AL.	
	Examiner Daniel P. Stephenson	Art Unit 3672	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 October 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 13 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).
3. Claims 1-4, 11, 12, 17 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Garret et al. Wells discloses a dual wall drill string assembly adapted for any subsurface drilling. It has a metallic outer tube (10) with first and second ends with threads for connecting to adjacent outer tubes. There is also a nonmetallic (col. 4 line 61) inner tube (18) with first and second ends having male and female portions that interact between adjacent tubulars. The inner tube is enclosed within and coaxially with the outer tube forming an annular space there between. The inner tube diameter is generally constant along the tube length from the first end to the second end. The string is used in dual circulation drilling. Gas is conveyed downward in the annular space between the strings and back up with cuttings through the inner

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string. There is also means for reinforcing the inner tube that does not restrict the flexibility of the outer tube. This reinforcement takes the form of a centering element (44, 48) located within the annular channel. The centering elements are lugs and wire projections located in the annular channel. The wire projections are located on a sleeve/ring. Wells does not disclose that the inner pipe is flexible nor that the centering elements can be a sleeve with openings therein, where the cross sectional area of the openings is either larger or smaller than the inside area of the inner pipe. Garret et al. (Figs. 1-3, 6-8, 13 and 14) discloses a drill pipe which has an outer tubular and an inner tubular. The inner tubular is made of a flexible material, as inferred from figures 13 and 14. Centralizers (50, 60) can also be utilized that are a sleeve with openings therein, where the cross sectional area of the openings is either larger or smaller than the inside area of the inner pipe depending on the size of the inner pipe and the size of the outer pipe. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the flexibility and centralizers of Garret et al. with the apparatus of Wells. This would be done to allow the expansion and contraction of the tubulars downhole as taught by Garret et al. (col. 6 lines 19-23).

4. Claims 5-10 and 19 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Garret et al. as applied to claims 1 and 17 above, and further in view of Terry et al. Wells in view of Garret et al. shows all the limitations of the present invention, except they do not explicitly state that the inner tube has a conductive element for conducting data or electricity through it, or that this element is a fiber optic line or a metallic mesh or that it is enclosed within the inner tube or that it communicates with a steering mechanism. In addition, they do not state that the drilling is done in a substantially vertical but arcuate path. Terry et al. discloses a composite material tubular that encloses a number of communication lines within, including

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fiber optic, copper lines and metallic meshes. These lines communicate with a number of downhole implements including a steering mechanism that monitors the direction of the drill. The drilling is performed in an arcuate path that is substantially vertical. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the enclosed lines and steering mechanism of Terry et al. with the apparatus and method of Wells in view of Garret et al. This would be done to allow for communication downhole and steering for directional drilling to allow for the drilling of lateral boreholes, as is common knowledge in the wellbore art.

5. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wells in view of Garret et al. as applied to claim 17 above, and further in view of Cherrington '267. Wells in view of Garret et al. shows all the limitations of the present invention, except they do not explicitly state that the drilling is done in a substantially horizontal arcuate path. Cherrington '267 discloses drilling in an arcuate path that is substantially horizontal. It would have been obvious to one of ordinary skill in the art at the time the invention was made to use drilling method of Cherrington '267 with the method of Wells in view of Garret et al. This would be done to allow for the drilling of horizontal boreholes, as is common knowledge in the wellbore art.

Response to Arguments

6. Applicant's arguments with respect to the claims have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

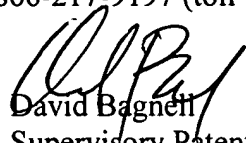
A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Daniel P. Stephenson whose telephone number is (571) 272-7035. The examiner can normally be reached on 8:30 - 5:00 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David J. Bagnell can be reached on (571) 272-6999. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


David Bagnell
Supervisory Patent Examiner
Art Unit 3672

DPS 9/17